

## DOCUMENT RESUME

ED 240 658

CS 504 549

AUTHOR Dudczak, Craig A.  
TITLE Coping with Information Overload as Adaptive Behavior in Competitive Debate.  
PUB DATE 21 Feb 84  
NOTE 20p.; Paper presented at the Annual Meeting of the Western Speech Communication Association (Seattle, WA, February 18-21, 1984).  
PUB TYPE Viewpoints (120) -- Speeches/Conference Papers (150)  
EDRS PRICE MF01/PC01 Plus Postage.  
DESCRIPTORS \*Adjustment (to Environment); Behavior Modification; \*Cognitive Processes; \*Debate; Futures (of Society); Higher Education; \*Persuasive Discourse; Secondary Education; Speech Communication  
IDENTIFIERS \*Generic Argument (Debate); \*Information Overload

## ABSTRACT

When the amount of available information exceeds the ability of the user to process it, "information overload" is created. In an attempt to maintain some control over the quantity of arguments they may face, debaters have developed adaptive behavior, primarily through the generic argument--any argument within a "deliverative" framework that recurs in fulfilling the discovery of issues. Using the generic argument's standard content or form, the debater can develop arguments that are familiar in their content or function as an aid to the audience's understanding of the issues. This definition has several implications. First, any issue or argument may become generic through the argument's analytic function or repetition of content. Second, generic argument is not an impediment to the discovery of new arguments. Finally, generic argument does not impede other adaptive responses to overload. Other fields will develop responses appropriate to their needs. (HTH)

\*\*\*\*\*  
\* Reproductions supplied by EDRS are the best that can be made \*  
\* from the original document. \*  
\*\*\*\*\*

U.S. DEPARTMENT OF EDUCATION  
NATIONAL INSTITUTE OF EDUCATION  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

X This document has been reproduced as  
received from the person or organization  
originating it.  
Minor changes have been made to improve  
reproduction quality.

- Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

ED240658

Coping with Information Overload  
as Adaptive Behavior in Competitive Debate

Craig A. Dudczak

University of Oklahoma

Western Speech Communication Association

1984 Conference, Seattle, Washington

February 21, 1984

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

Craig A. Dudczak

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC) "

504 549

In his preface to the fifth edition of Argumentation and Debate, Austin Freeley cited the commonplace judgment that the sum total of knowledge has doubled every five years since 1960.<sup>1</sup> This exponential increase in the amount of information characterizes both the general availability of information in society as well as within academic debate.

The increase in the amount of available information is a mixed blessing. While more information may allow its users greater perspective in their consideration of an issue, excessive amounts of information creates pressure upon its users to deal with it meaningfully. When the amount of available information exceeds the ability of the user to process it, a condition generally referred as "information overload" is created.<sup>2</sup>

It should not be surprising that the expansion of available information within society would find its way into the practice of academic debate. Information available to social actors in their consideration of issues likewise is available to the debaters addressing the same issues. In addition to the information available pertaining to the substantive issues about which we debate, debaters have also been confronted with a proliferation of theoretical issues dealing with perspectives on the process by which substantive issues are to be resolved.

When available information exceeds the user's ability to process it, an adaptive response is necessary. The adaptation may take several forms, some of which may result in dysfunction. In any event, debaters, like their social counterparts, discover alternatives to deal with ever-expanding amounts of information. The result is that the practice of debate has changed. As Freeley noted, "the accelerated rate of change has had a marked impact on the field

of argumentation and debate. The simple fact is that in many important ways we no longer analyze arguments, build cases, or conduct debates in the way we did ten or even five years ago."<sup>3</sup>

It shall be my contention in this paper that the development and use of what has been labelled "generic argument" is one adaptation to the increased availability of information. In developing this position I will briefly elaborate the nature of overload, explain its consequences in the processing of information, define generic argument, and offer a rationale for generic argument within a perspective of coping with information overload. Finally, I will suggest implications for the use of generic argument.

### The Nature of Overload

I have already indicated that information overload occurs when the available amount of information exceeds the ability of the user to process it. The phenomenon of overload may describe either an individual or societal inability to process information. That is to suggest that what may constitute overload for one individual may not constitute overload for another. Similarly, what constitutes overload within a social grouping at some point in time may not necessarily result in overload for another social group. Prior to the popularization of the term "information overload," sociologists had postulated the concept of "cultural lag." Writing in 1923, William Ogburn explained cultural lag in Social Change:

The thesis is that the various parts of modern culture are not changing at the same rate, some parts are changing more rapidly than others; and that since there is a correlation and interdependence of parts, rapid change in one part of culture requires adjustments<sup>4</sup> through other changes in the various correlated parts of culture.

The cultural lag occurred because change was not uniform within parts of the society. Often the lag was to be found in the differential rates of develop-

ment between scientific and social knowledge. It was usually the case that scientific and technological advancements outpaced the ability of social institutions to make adjustments. Klapp explained that it was most often found "that material culture, such as technology, changes faster than nonmaterial culture, such as beliefs and habits, resulting in maladjustment because old habits and ideas cannot keep up with new realities."<sup>5</sup>

While a cultural lag could occur for reasons other than too much information, the theory of cultural lag provided an early explanation of why information generated by one segment of society often exceeded the capacity of other social institutions to adapt to it. Additionally, the sociological perspective focused upon information at the level of social units.

The contemporary treatment of information overload probably dates to Georg Simmel who observed that people often adopt an "attitude of reserve" to prevent the "indiscriminate suggestibility" of others from dominating them.<sup>6</sup> Karl Deutsch, another sociologist, opined that "individuals seeking the greater range of choice afforded by the city may be overwhelmed by their own freedom to make choices." Deutsch suggested that the potential for the individual to confront overload was a function of the choices made possible by the metropolis.<sup>7</sup>

In the sense in which Simmel and Deutsch treat overload it is understood that as the number of choices available to the individual increase, there is a threshold, beyond which additional information fails to facilitate the ability to make choices. Overload represents the point where the individual is no longer capable of absorbing the additional information in a usable fashion. Individuals are limited in receiving information through their processing capacities. Klapp describes this as channel capacity:

. . . beyond a point one cannot take more within a given period of time because of limits on the pathway through which information flows. All living systems have--indeed are--channels. All units through which information flows, whether living things or machines, are regarded as channels. . . . Overload is often defined in terms of measurable rela-

tionships between input and output of a system. The limit of a system, beyond which failure of communication from overload occurs, is usually called its channel capacity.

There are at least two dimensions in which overload operates. First, there is the sense in which overload is understood to be an excessive amount of information available to its user. There is more information available to the recipient than can be processed. Miller reports that the capacity per channel decreases as the size of the system increases.<sup>9</sup> Further, technical advances which increase the flow of information to the user may be counterproductive, as the user may already have more information available than can be efficiently utilized.<sup>10</sup>

The second sense in which overload may occur deals with the absence of a ready frame of reference in which to comprehend it. This is to say that for any information to be meaningful, it must be placed within an interpretive frame of reference. Information--phenomena, facts, data--does not suggest its own interpretive framework. As Polanyi has observed, knowledge of the principles and properties which exist at a subordinate level does not provide an explanation of the principles and properties which exist at a superordinate level of organization.<sup>11</sup>

Interpretation of information is a subjective process of theorizing. The separate bits of information must be connected in an hierarchical arrangement which gives order and meaning to both the separate parts as well as to the whole. Reynolds suggests that this type of interpretive theorizing usually requires two conditions: The number of variables to be measured must be small and there may only be a few patterns which occur in the data. He observes that within the social sciences the likelihood of fulfilling these conditions is remote.<sup>12</sup>

We are in the position of a man piecing together a puzzle. We don't have a picture of what the completed puzzle will look like. In fact, we keep receiving additional puzzle pieces as we work. Some of the pieces may not even belong

to the puzzle. Such is the problem presented by the two dimensions of overload. We may be getting more puzzle pieces than we can handle as well as we may not be able to make sense of those pieces we already possess.<sup>13</sup> Even in the unlikely event where we have all of the information, it may not be interpretable. Klapp postulates meaning formation is relatively constant. He explains that:

the reason for the steady curve of meaning formation is that society is already using most of its channel capacity for coding and decoding symbols and for synthesizing new meaning, and has invented no new ways to do so. Meanwhile, raw information pours in faster than ever, from sources such as science, technological invention, modernization, and changing fashion.<sup>14</sup> So the paradox is possible: the more knowledge, the less meaning.

Debaters are a microcosm of the larger social world in which overload operates. They are also confronted by the twin problems of absorbing the growing amounts of information which is available as well as making it meaningful. In the next section I will address some of the consequences of overload and the general types of adaptive responses available. .

### Consequences of Overload

Miller categorized the effects of overload to include: (1) omission, which is the temporary nonprocessing of information; (2) processing error, which is to process incorrect information; (3) queuing, which is to delay some responses during high input periods in the hope that it may be possible to catch up during a lull; (4) filtering, which consists of selecting some kinds of information while ignoring others; (5) cutting categories of discrimination, which occurs by responding in a more general way to information inputs, but with less precision than would occur at lower rates of information; (6) using multiple channels, which is spreading information through two or more channels to relieve the rate of flow available through any single channel; and (7) escaping from the task.<sup>15</sup>



Each of these responses to overload is an attempt to reduce the processing load. Assuming they can be effectively employed, efficiency in information transmission is decreased. While not all systems employ all of these mechanisms, generally, the larger the system the more likely that these mechanisms will be used.

As decreased efficiency in the transmission of information occurs, the primary question which arises is what information gets eliminated. While individuals or social institutions have strategies for selecting which information is selected, the strategy itself may obscure the consequences of the information which is ignored. According to Raymond, ninety-nine percent of the relevant information may be excluded.<sup>17</sup> The implications are staggering.

Eliminating information has effects at all levels of decision making. Within a pluralistic system--one in which decisions made at one level do not imply agreement at another--decision makers may make choices and interpret meaning in ignorance or without understanding of the choices made by other actors in the system. An example familiar to many debaters is cited by Klapp:

The world energy crisis of 1974, compounded by the Arab oil boycott, pointed up the failure of information to solve problems: It had been foreseen for at least a decade by scientists giving full warning that the supply of fossil fuels was running out. Four years earlier a book had been published with the title The Energy Crisis, by Lawrence Rocks and Richard Runyan.<sup>18</sup>

The very abundance of information about the coming energy crisis constituted the problem. With increasing sources generating data and making interpretations of information, the decision making agents operating at various levels within the public and private sectors make choices in ignorance of the choices and rationale selected by other agents. Policy dysfunction may occur because too much information may stand in the way of achieving a political consensus.<sup>19</sup>



Authoritative sources (experts, opinion leaders, etc.) may be sought to give interpretation to increasing information. However, the very number of "expert" commentators may contribute further to the problem as they but add to the welter of opinions:

. . . with little consensus and less trust, that seldom speaks for more than a minority--the very multiplication of authoritative claims adding ironically to the bulk of information needing interpretation. So--even helped by the interpretation of opinion leaders and the enormous speed of information diffusion--we see not a gain in meaning, but a growing mountain of information about which people do not know what to think.<sup>20</sup>

Expert opinion may further contribute to the overload of information placing us again in the paradox where we have plenty of information, but no useful means of securing it. Overloads, both in the amount of data, as well as in the competing interpretations of its meaning, contribute to the inability of decision makers to make appropriate choices.

The contemporary debater is confronted by this sea of information. It should be expected that the difficulty of making appropriate choices should not be any different within debate than within the general social milieu. The debater's task of dealing with the expansive amounts of information available to the consideration of a debate resolution is further confounded by changes in the practice of the activity. For as Freeley observed, we no longer analyze arguments, build cases, or conduct debates as we did five or ten years ago.

Debaters are faced by competing paradigms, new case formats, and innovations in theory and practice which have multiplied over the course of the last two decades. Often, the innovations in practice precede the development of a theoretical construct to account for them. The result is that argument in debate has expanded in an attempt to account for a myriad of theoretical/procedural issues about the rules by which the debate should be conducted in addition to the substantial amount of information bearing on the substantive issues

of the debate resolution. For many debaters, critics of debate, and debate judges, academic debate has become a game in which there are no rules.<sup>21</sup>

In an attempt to maintain some control over the quantity of arguments they must potentially face, debaters have adapted their behavior. Some of these behaviors have been in the direction of compromising a persuasive style in preference of an accelerated rate of delivery. Critics, especially those outside of the activity, have been especially critical of this form of adaptation.<sup>22</sup>

The purpose of this paper is not to defend all such adaptive responses in the practice of debate. Rather, it is to argue that adaptation to overload is a normal response. Overload is not a phenomenon unique to debate. It is just that the nature of debate has directed some of the adaptation in directions which do not have parallels immediately apparent in other fields. One such adaptation which debate has generated, and which I will defend, has been the development of generic argumentative positions.

#### The Nature of Generic Argument

While many debaters have used generic argument, there is relatively little mention of the term in most contemporary debate texts. Only Patterson and Zarefsky make reference to forms of generic arguments.<sup>23</sup> As a consequence, some definition is called for here. Webster's Seventh New Collegiate Dictionary includes the definition for "generic" as "relating to or characteristic of a whole group or class: General."<sup>24</sup> In discussing generic disadvantages, Patterson and Zarefsky provide a debate context for defining generic disadvantages by noting "they apply generally to any plan that the affirmative may devise for setting up its program."<sup>25</sup>

I would extend the context for considering generic argument in debate to note that there are other types of arguments, besides disadvantages, which by

general characteristic of content or form may be properly labelled as "generic." What makes an argument generic is that it responds to recurring issues in the debate process.

Recurring issues in the debate are matters of content when the action required or implied in the plan is constant. A resolution which called for the extension of U.S. foreign policy commitments would necessarily require some additional economic, political, military or social commitment. It is likely that consequences of such action would be generic. For instance, the claim that any of the above mentioned actions would be imperialistic would be based on the premise that any extension, per se, is imperialistic and not the particular type of new commitment.

Recurring issues are matters of form when they fulfill a common argumentative function. This is to say that while the substance of the argument may differ from instance to instance, there is a common purpose to the type of argument made in each instance. Stock issues in debate illustrate the discovery of common purpose. The stock issue of inherency, for example, informs the debater of the location where certain arguments may be discovered. So even if the reasons why U.S. foreign policy fails is different from the reasons why an economic policy fails the common element of the issue of inherency unites them in their analytic purpose. Since the function of argument remains constant, we should expect that debaters will continue to offer arguments that are analytically similar, even when the specific proposition under consideration changes.<sup>26</sup>

So what I have proposed to be the nature of generic argument is that it is any argument within a deliberative framework which recurs in fulfilling the discovery of issues. Both the content of an argument or its analytic function qualifies it to be considered as generic when applied to particular cases.

Generic Argument as a Means of Coping with Overload

If one accepts the premise that the increase in information is faster than our ability to comprehend its meaning, then the challenge confronting the debater, as well as other social actors, is how to gain some control over it. I propose that the use of generic arguments provides a means of coping with information overload.

The application of standard forms of argument is hardly new. In the Rhetoric, Aristotle described twenty-eight lines of argument (otherwise known as "topoi" or "commonplaces") as well as standard refutations of "spurious enthymemes." The patterns of these arguments assume regularity of function, so that even if the particular issue at hand is new, the form of the standard line of argument is familiar to the audience and hence contributes to their understanding of the argument being made.<sup>27</sup>

It is an extension of this rationale which underlies the generic argument. Generic argument, through its standard content or form, allows the debater to develop arguments which are familiar in their content or function as an aid to the audience's understanding of the issues. For example, lines of argument directed against definition are always possible.<sup>28</sup> The debater who develops "Standards of Topicality" engages a commonplace which is meaningful in a generic sense (appropriate to all topics), even though the particulars of its application will be modified by the specific case and topic under consideration.

This is valuable because familiarity aids understanding. To argue standards of topicality across topics allows the audience (in this case the debate judge) an understanding of the class of arguments called topicality. Similar applications can be made for other types of generic arguments. In the case of the generic disadvantage, the consequences of the argument are applied to the inherent elements of the plans generated by the resolution.

The use of generic argument allows the person proposing it to focus attent-

ion on its application to the case at hand. Because the form or content of the argument is already known, it provides a comprehensible explanation. It may be that the use of a particular generic argument may be inappropriate in a given instance, but even its inappropriateness is made understandable because of its content or function assist the audience in making this decision.

Generic arguments as contemporary forms of the commonplace address the problems created by overload. When the case presented to the negative is unanticipated, the functions of argument which the case must fulfill provide the respondent with a means of testing the claims. Study indictments, reasoning flaws, inconsistencies, and the like can provide fruitful grounds for refutation absent specific case evidence. Additionally, where the proposition stipulates a particular course of action or effect, a generic response to the content of the proposal is in order.

Some readers may object to the preceding example as an illustration of generic argument as nonrepresentative. They would argue that refutation of argument which is guided by the function of argument is more akin to the traditional "Stock Issues" analysis than it is to the concept they have in mind when discussing generic argument. They would suggest that generic argument is more appropriately represented by the debater who uncritically makes the same arguments in debate after debate regardless of the particulars of the case.

At least two responses are in order. First, bad argument is neither unique nor inherent to generic positions. I have already proposed that the nature of the proposition may legitimize generic responses because of the action or effect implied by the topic. In this sense, generic arguments of common content applied to all cases are, in effect, case specific.

Second, in the case where function of argument becomes the element which defines generic argument, I mean to suggest that all argument has generic ele-

ments. Whether we label these stases, commonplaces, or generic arguments, they characterize a class of argument types which are applicable across propositions. Their recurring features allow us to make meaningful interpretations of novel information because, regardless of content, they need to fulfill standard analytic functions of argument.

An additional consideration which may justify the use of generic argument is the analytic assumptions an affirmative (or in the case of a counterplan, the negative) brings to the debate. As Brock et al observed, it is much easier to design a system that will result in advantages without disadvantages when the boundaries of the system are quite narrow."<sup>29</sup> As a matter of strategy the affirmative either ignores or discards effects which would be weighted against the consideration of a policy. However, the secondary or tertiary effects of a policy, because of their magnitude, may outweigh the justification for a proposal. The fact that the effects which weigh against a policy are remote (either in terms of the links necessary to create the effect or the probability of the effect) is not a reason to say the argument is inapplicable.<sup>30</sup>

The Systems theorists have long argued that open systems are characterized by "equifinality"--an assumption that "a final state may be reached from different initial conditions and in different ways."<sup>31</sup> This is to say that a variety of circumstances may each independently result in a similar effect. Generic arguments may be applicable to a variety of conditions because there are alternate ways in which they are linked to the proposed action. To presume that a generic claim is inappropriate because it is not intuitively apparent within one frame of reference is to remove the debate process from the consideration of reasons and justifications provided by the debaters to an a priori set of allowable issues.

Generic arguments give the audience comprehensible positions because they are familiar. They allow the audience to make decisions intelligently. Admit-

tedly, generic arguments may begin with preconceptions about refutation before the argument to which they are directed are ever heard. But to the extent that they can be justified in their application to the particulars of a given case, this reasoning backwards provides a means of controlling issues, and otherwise imposes meaning on an evergrowing amount of information available to the consideration of a proposal.

### Implications for Generic Arguments

There are several implications from the definition of generic argument as one which assists in the discovery of recurring features of content or function.

1. All issues/arguments may become generic. I have already suggested that the analytic function fulfilled by an argument makes it generic. Additionally, through repetition of use, the content of an argument may become generic. The nature of debate is such that nothing succeeds like success, and the initiation of any argumentative strategy, if successful, is likely to be repeated. As Harwood noted in Forensics as Communication, "as knowledge that the theoretical departure has been rewarded spreads, the departure is gradually adopted by other teams and soon becomes accepted practice."<sup>32</sup>

A novel argument or strategy doesn't remain novel long. And while Harwood's example referred to the expansion of new theoretical claims in debate, there is no reason to believe that she has also described the process by which debaters imitate other types of argument which are successful. Similarly, new evidence, once exposed, is researched by other debaters. What constitutes one debater's innovation may become tomorrow's new generic argument.

2. Generic Arguments are not an impediment to the discovery of new arguments.

While on the surface this may seem counter-intuitive to the claim that generic arguments relies on recurring features of content and function,



I don't believe this to be the case. While uncritical repetition of argument does not promote the discovery of new issues, the debater is often confronted with situations where he/she must apply an understanding of the function of argument to novel situations.

I suggested earlier that knowledge of the stock issues informs the debater where to look for argument. A knowledge of the issue of inherency does not mean debaters make the same arguments about the issue in every round. Rather, a knowledge of the function of an inherency issue informs debaters about how the opponent must sustain a position, and in so doing suggests potential ground where the issue may be contested. In the sense I have been using the term, stock issues become a form of commonplace which aid in the discovery of issues.

In another vein, the application of recurring functions of argument means that a new application must be attempted to link known effects to novel situations. The fact that the consequences of nuclear war are well-documented does not mean that a generic nuclear war disadvantage will automatically be linked to a given policy. Debaters discover the connections between their generic positions and particular policies. That many scenarios may be linked with the causes of a nuclear war is only to give practical application to the concept of equifinality. But the burden of discovering the connection remains with the debater who would advocate the argument.

Finally, the criticism is often made that the use of generic arguments inhibits the debater's critical processes. This criticism is a longstanding one and probably as old as the activity. In 1907 The Speaker commented that debaters make "rigid speeches, discussing absurdly loud questions in an absurdly short time."<sup>33</sup> In a similar vein, Musgrave charged that the brief was unsuccessful because it "confines the debater to a set of arguments

that may be irrelevant from the start and that are almost always irrelevant when the opposition's case is presented."<sup>34</sup>

The common thread through these arguments, while applied to briefing, but which implicitly apply to generic arguments, is that discovering potential issues before the debate may obscure the actual issues. While it is probably true that debaters may ignore appropriate spontaneous arguments, it is not a necessary consequence of preparing generic positions in advance of the debate. Analysis conducted outside of the debate about the likely issues improves the quality of arguments. Poor strategic choices are more likely to occur in a spontaneous response as with a prepared argument.

Imagine the trial lawyer who would forsake the preparation of arguments before the trial in preference of a spontaneous defense of a client. Of course, the defense counsel is aided by discovery rules which make the prosecution's case easy to anticipate. Similarly, debaters often have foreknowledge of the opposition's case through previous encounters or through word of mouth.

Responding to some of the earlier challenges to preparing a brief before the debate, Baird noted that the process of briefing:

gives order to your thought, logical sequence and definitiveness of statement, and other rhetorical results that are no mean elements in effective speech. . . The mature student of briefing needs not be a slave to his rigid document. Its construction has sharpened the mental processes, given facts, and created a mental alertness which means a continuation of creative thinking.<sup>35</sup>

So, as with the brief, the choice of the use of a generic argument involves a complex of strategic choices. Bad choices are always possible, but the elaboration of thought in advance of the event is likely to aid in the discovery of potential issues.

3. Generic Argument does not impede other adaptive responses to overload.

I began with the assumption that information overload was a problem which impinges on the entire social system. Debate is only one part of that system. Generic argument is appropriate to debate by the rationale I have developed. It may also be appropriate to other forms of argumentative discourse as the discovery of recurring features of content or function would be likely in other fields. This is to say that generic forms of arguments may be found in legal, political, aesthetic, professional, and scientific fields. In fact, there are likely to be generic elements within the field-dependent standards for the evaluation of argument within any field.

While other responses to overload may be required, the debate community should not bear the burden of their discovery. For each field of inquiry develops its own adaptive responses to overload. Generic argument in debate is one such response appropriate to the field of debate. As a discipline, generally in communication, more specifically within argumentation, we are faced with the task of developing strategies to cope with overload. This charge will not likely diminish in the foreseeable future as predictions of increased load are expected.

Other fields will develop responses appropriate to their needs. As a microcosm of a larger social phenomenon, debate has developed responses which has allowed it to cope with change. If these adaptations are not universally applauded, they nevertheless are evolutionary. Other adaptive changes will be forthcoming. But it is the nature of the problem which defines the response, and so long as information overload continues to characterize debate, adaptations like generic argumentation will continue.

## Endnotes

<sup>1</sup>Austin J. Freeley, Argumentation and Debate, 5th ed., (Belmont, CA: Wadsworth, 1981), p. vii.

<sup>2</sup>Georg Simmel, The Sociology of Georg Simmel, ed. and trans. Kurt H. Wolf, (Glencoe, IL: Free Press, 1950). See also Karl Deutsch, "On Social Communication and the Metropolis," in Alfred G. Smith, ed., Communication and Culture (New York: Holt, Rinehart & Winston, 1966), p. 389.

<sup>3</sup>Freeley, Argumentation and Debate, 5th ed., p. vii.

<sup>4</sup>William F. Osburn, Social Change, (New York: Viking, 1923), pp. 200-201. See also F. Stuart Chapin, Cultural Change, (New York: Century, 1928), p. 210; 218-219.

<sup>5</sup>Orrin E. Klapp, "Meaning Lag in the Information Society," Journal of Communication 32 (Spring 1982), p. 57.

<sup>6</sup>Simmel, p. 415.

<sup>7</sup>Deutsch, p. 389.

<sup>8</sup>Orrin E. Klapp, Opening and Closing, (New York: Cambridge University Press, 1978), pp. 50-51.

<sup>9</sup>James G. Miller, "Information Input Overload and Psychopathology," American Journal of Psychiatry 116 (February 1960), pp. 698-699.

<sup>10</sup>F. Wilfred Lancaster, Information Retrieval Systems, 2nd ed., (New York: Wiley & Sons, 1979), p. 314.

<sup>11</sup>Michael Polanyi, The Tacit Dimension, (Garden City, NY: Doubleday & Co., 1967), pp. 3-25.

<sup>12</sup>Paul D. Reynolds, Immer in Theory Construction, (Indianapolis: Bobbs-Merrill, 1971), pp. 139-141.

<sup>13</sup>Klapp, Meaning Lag in the Information Society, p. 58.

<sup>14</sup>Ibid., 59-60.

<sup>15</sup>Miller, p. 697.

<sup>16</sup>Ibid.

<sup>17</sup>R.C. Raymond, "Betting on the New Technologies," cited in Orrin E. Klapp, Opening and Closing, p. 48.

<sup>18</sup>Klapp, Opening and Closing, 66-67.

<sup>19</sup>Ibid., 68.

<sup>20</sup>Klapp, Meaning Lag in the Information Society, p. 61

<sup>21</sup>M. Jack Parker, "How to Play a Game Which Has No Rules," Journal of the Illinois Speech & Theatre Association XXXII (1978), p. 45.

<sup>22</sup>Craig Pinkus, "On Collegiate Debating," in Spectra (SCA, XIX, September 1983), p. 6.

<sup>23</sup>J.W. Patterson and David Zarefsky, Contemporary Debate, (Boston: Houghton Mifflin, 1983), pp. 207; 247.

<sup>24</sup>Webster's Seventh New Collegiate Dictionary, (Springfield, MA: Merriam Co., 1969), p. 348.

<sup>25</sup>Patterson & Zarefsky, p. 207.

<sup>26</sup>Raymond E. Nadeau, "Hermogenes on 'Stock Issues' in Deliberative Speaking," in Readings in Argumentation, Anderson & Dove, eds., (Boston: Allyn & Bacon, 1968), pp. 142-143.

<sup>27</sup>Aristotle, The Rhetoric, trans W. Rhys Roberts, (New York: Random House, 1954), Book II, 1397a<sub>6</sub>-1403a<sub>16</sub> (pp. 142-163.)

<sup>28</sup>Ibid., 1398a<sub>15-27</sub> (pp. 146-147.)

<sup>29</sup>Bernard L. Brock, James W. Chesebro, John F. Cragan, & James F. Klumpp, Public Policy Decision-Making, (New York: Harper & Row, 1973), p. 124.

<sup>30</sup>David Baker, "Tracing Consequences of Policy Action: A Basis for Disadvantage Arguments," Unpublished paper, 1983, pp. 3-10.

<sup>31</sup>Ludwig von Bertalanffy, "General Systems Theory," in General Systems Theory & Human Communication, Rubin & Kim, eds., Rochelle Park, NJ: Hayden, 1975), pp. 10; 14.

<sup>32</sup>Annabel D. Hagood, "Theory and Practice in Forensics," in Forensics as Communication, James McBath, ed. (Skokie, IL: National Textbook, 1975), p. 103.

<sup>33</sup>"The Unreality of College Debates," The Speaker 3 (1907), p. 1.

<sup>34</sup>George McCoy Musgrave, Competitive Debate: Rules and Techniques, 3rd ed., (New York: H.W. Wilson, 1957), p. 57.

<sup>35</sup>A. Craig Baird, Public Discussion and Debate (Boston: Ginn & Co., 1928), pp. 134-136.